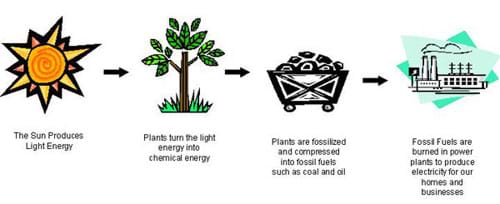
**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

### Lesson Background

We use energy in all its forms almost every day. Engineers and scientists study these forms of energy to help create things that make our lives easier. Currently, these people are looking for better ways to produce electricity to keep energy affordable and less destructive to the environment. They are also investigating alternative fuel sources for use in vehicles, such as ethanol from corn and hydrogen from water.

Energy takes many forms. Thermal energy (or heat) boils water, keeps us warm and drives engines. Chemical energy fuels automobiles and airplanes. Electrical energy drives many small machines and keeps lights glowing. Almost every form of energy can be converted into other forms. But whatever form it is in, energy is essentially the capacity for making something happen or, as engineers and scientists say, "doing work."



(Figure 1. The energy cycle from the sun to our homes.)

Nearly all our energy comes to us ultimately from the sun (see Figure 1). We get some energy directly via passive solar lighting and heating, or solar power cells. However, most energy comes indirectly via burning fossil fuels (coal, oil and gas), which received their energy from fossilized plants and other organisms. The plants and organisms originally obtained their energy directly from the sun by a process called photosynthesis. Some of these sources of energy are renewable and others nonrenewable or limited in their available quantity.

### Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Writing about Energy

* First choose 1 – 2 images (tape or glue the image into your document) then decide which form of energy the image illustrates. Using complete sentences, support your reasoning using information from your handouts, graphic organizers, and what you learned today. In your statement, be sure to talk about whether the energy source is renewable or non-renewable.

|  |  |
| --- | --- |
| **Image** | Statement |
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| **Image** | Statement |
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